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EXAMINER

MCDERMOTT, KEVIN

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/673,001

Applicant(s)

KROIE, ROBERT

Examiner

Kevin McDermott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 15, 19, 22-31 and 38-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 22-31 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-12, 14, 15 and 38-40 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 10-12, and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hesser in view of Nakamoto.

Hesser is directed towards a structural wall apparatus.

Regarding claims 1, 38, and 39, Hesser discloses in figures 1, 2, 4, and 5, and in column 2, line 68, to column 4, line 27, a structural and insulated wall 10 having a plurality of panels 11 interconnected to each other. Each panel 11 has a metal skin 12 and an inner skin 13 spaced by a uniform thick insulating material 14 which may be a foamed polymer, such as a polystyrene or polyurethane rigid foam, to form a structural lightweight panel 11. Col. 4, lines 11-14 disclose the skins 12, 13 being metal. Each panel 11 has abutting attaching ends 15 and 16 with the end 15 having a metal lined tongue 17 and a metal lined groove 18 in which the metal lining continues from the inner and outer skins 13, 12. The panel end 16 has a metal lined groove 22 which exactly coincides and co-acts with the tongue 17 and has a tongue 23 which co-acts with the metal lined groove 18. Thus, when two panels 11 and 23 are connected, the tongue 17 is inserted into the groove 22 while the tongue 23 is inserted into the groove 18. Figure 1 discloses the panels 11 configured so that the outer skins 12, 13 are aligned and in substantially abutting relationship to form a continuous surface.

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The foamed polymer is the claimed core and the skins 12, 13 the claimed metal sheet substrates. The foamed polymer has opposite major faces and end edges that extend between and are generally perpendicular to the major faces. The metal sheets 12, 13 include opposite edges that are shaped to form end regions of the panel 11. These end regions extend inboard of the core major surfaces and across each end edge of the core. Each end region contains a tongue 17, 23 and groove 18, 22. The tongues are projections and the grooves are channels.

However, Hesser does not disclose disposing a paper covering on the metal skins 12, 13.

Nakamoto is directed towards a paper laminated metal sheet, including a metal base material and paper laminated on the metal base material, which has various applications including construction material for houses and buildings such as inner wall materials for houses.

Nakamoto discloses in column 2, lines 51-56, a paper laminated metal sheet having a structure in which at least a sheet of paper is laminated on at least one side of a metal base material via a pressure sensitive adhesive agent or adhesive agent layer, and a protective layer is formed on the top surface of the paper laminated side. The sheet of paper is the claimed paper covering and the protective layer is the claimed finish.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hesser to dispose a paper covering on the metal skins 12, 13.

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One of ordinary skill would be motivated to make such a modification to create an aesthetically pleasing panel.

Claims 1 and 38 also recite "using finishing techniques". Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If a product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

Regarding claim 3, the grooves 18, 22 of Hesser are generally C-shaped in cross section incorporating opposite walls interconnected by a substantially flat base portion.

Regarding claim 4, the opposite walls of the C-shaped channel meet the base at approximately 90 degrees.

Regarding claims 5 and 6, the tongues 17, 23 have a cross sectional area that complements the cross section of the grooves 18, 22 so that the tongues 17, 23 of one panel fit in nesting engagement with the grooves 18, 22 of an other panel.

Regarding claim 10, the disclosures of Hesser and Nakamoto are discussed above. However, neither Hesser nor Nakamoto disclose using a reactive hot melt adhesive to secure a paper covering to the metal sheets. As discussed above, Nakamoto discloses using a pressure sensitive adhesive agent or adhesive agent layer to secure a paper layer to metal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any type of adhesive, including a reactive hot melt

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adhesive, to secure a paper covering to the skins 12, 13, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice.

One of ordinary skill would be motivated to make such a modification to secure the finish to the skins 12, 13.

Regarding claim 11, the disclosures of Hesser and Nakamoto are discussed above. Additionally, as discussed above, Nakamoto discloses using a pressure sensitive adhesive agent or adhesive agent layer to secure a paper layer to metal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to dispose a paper covering directly on the metal skins 12, 13 of Hesser.

One of ordinary skill would be motivated to make such a modification to provide the strongest connection between the metal skin and the paper covering.

Regarding claims 12 and 40, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If a product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Examiner suggests canceling claims 12 and 40 because they do not contain structural limitations of the claimed building panel.

Claims 2, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hesser in view of Nakamoto and further in view of Meyerson.

The disclosures of Hesser and Nakamoto are discussed above. Additionally, Nakamoto discloses the paper preferably being a decorative sheet. However, neither Hesser nor Nakamoto disclose abutment surfaces extending generally perpendicular to the major faces of the panel, the paper sheeting being substantially the same as a plasterboard panel, the skins 12, 13 being made from a metal, and using a metal guage between .3 and 1 mm.

Meyerson discloses in figures 1-3 and in column 4, lines 7-13, a panel 10 comprising a foam core 11 which is made from an insulating material which is relatively rigid such as expanded polystyrene. The foam core includes a front surface 12, a back surface 13 and two side or end surfaces 14 and 15. Side surface 14 of the foam 11 has a female configuration while side surface 15 of the foam 11 has a male configuration. The top 16 and bottom 17 surfaces of the foam core 11 are covered by metallic cladding 18, 19, respectively, such as aluminum or steel. As disclosed in figure 3, the abutting end surfaces 14, 15 are perpendicular to the top 16 and bottom 17 surfaces.

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to modify the material surfaces 20, 21, of Hesser, to be generally perpendicular to the major surfaces of panel 11, to use paper sheeting substantially the same as a plasterboard panel, to make the skins 12, 13 from aluminum, and to make the guage of aluminum between .3 and 1mm. Additionally, it would have been an obvious matter of design choice to make the (skins 12, 13) aluminum between .3 and 1 mm thick, since applicant has not disclosed that doing so solves any stated problem or is for any particular purpose. Furthermore, it would have been an obvious matter of

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design choice to use another type of paper sheeting, since applicant has not disclosed that doing so solves any stated problem or is for any particular purpose.

One of ordinary skill would be motivated to make such modifications to provide a safe, flush fit between panels, and to provide a strong aesthetically appealing panel.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hesser in view of Nakamoto and further in view of Meyerson.

The disclosures of Hesser and Nakamoto are discussed above. However, neither Hesser nor Nakamoto disclose using a snap fit arrangement to connect panels.

Meyerson's disclosure is discussed above. Additionally, Meyerson discloses in figures 1-3 using a snap-fit connection between the panels.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tongues and grooves of Hesser to include interlocking means.

One of ordinary skill would be motivated to make such a modification to temporarily hold the panels together before using the fasteners.

Claim 9 as best understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Hesser in view of Nakamoto and further in view of Ehrlich.

The disclosures of Hesser and Nakamoto are discussed above. However, neither Hesser nor Nakamoto disclose a panel major surface having a recess adjacent the end region.

Ehrlich discloses in figure 2, panels 142a, 142b having coined or stepped down end sections 160a, 160b. The ends are stepped down so that logistics plate 152 is

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flush with the wall surface to form a smooth wall surface at the joints and to discourage snagging at the joints.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the panels of Hesser to include stepped down areas adjacent the panel ends.

One of ordinary skill would be motivated to make such a modification to provide a smooth wall surface at the joints and to discourage snagging at the joints.

Claim 9 also recites "by using finishing techniques". Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If a product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Examiner suggests canceling claims 12 and 40 because they do not contain structural limitations of the claimed building panel.

Allowable Subject Matter

Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not disclose, and it does not appear obvious to modify the prior art to disclose, a panel having a tongue and groove connection, wherein the groove

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includes a depression on its inner surface and the tongue includes a protuberance on its outer surface, and the protuberance snap-fits into the depression to snap fit adjacent panels together.

Claim 19 and claims 22-31 depending therefrom, are allowed. Independent claim 19 is allowable because it has been amended to include the allowable subject matter from dependent claim 21.

Response to Arguments

Applicant's arguments with respect to claims 1-7, 9-12, 14, 15, 19, 22-31, and 38-40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kevin McDermott, whose telephone number is 703-308-8266.

A handwritten signature in black ink, appearing to read 'Carl D. Friedman', with a long horizontal flourish extending to the right.

Carl D. Friedman
Supervisory Patent Examiner
Group 3600

KM 10/08/03